

Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

1. (Currently Amended) A device for the 3D free-form bending of profiles with constant outside dimensions over their length, particularly with a circular shape, wherein said device comprises a feed unit that contains a rotary drive for turning the profile about its longitudinal axis and serves for moving the profile with a longitudinal axis in a feed direction that extends parallel to this longitudinal axis, namely through a guide element with a through-opening that adjoins the surface of the profile and a bending sleeve that at least partially encloses the profile to be bent and is arranged downstream of the guide element referred to the feed direction, wherein said bending sleeve is held in a carrier element and can be pivoted about an axis that extends perpendicular to the feed direction of the profile, as well as displaced perpendicular to the longitudinal axis and the pivoting axis, together with said carrier element such that the bending sleeve acts upon the profile in a bending fashion, wherein

a) the guide element ~~contains means for supporting~~ supports the profile such that it can be turned about the longitudinal axis in or with the guide element,

b) the bending sleeve ~~contains means for supporting~~ supports the profile such that it can be turned about the longitudinal axis in or with the bending sleeve,

c) the bending sleeve is supported such that it can be eccentrically pivoted about a first hinge point of a rocker by means of the carrier element, wherein the rocker, in turn, is supported such that it can be pivoted about a second hinge point that is arranged eccentric to the longitudinal axis of the profile on the same side of the profile as the first hinge point, and

d) the carrier element is held in a guide groove on the opposite side of the profile referred to the hinge points, namely such that the inner surface region of the bending sleeve that acts upon the outside of the profile in a bending fashion is, discounting the resilience of the profile, always aligned tangential referred to a circular arc that corresponds to the respectively desired bending radius when changing the position of the part of the carrier element that is supported in the guide groove.

2. (Previously Presented) The device according to Claim 1, wherein the rotatably supported guide element is realized in the form of a guide sleeve.
3. (Previously Presented) The device according to Claim 2, wherein the guide sleeve is longitudinally divided.
4. (Previously Presented) The device according to Claim 1, wherein the through-opening of the guide element has a cross-sectional shape that essentially changes continuously in the feed direction such that the guide element acts upon the profile as a shaping tool.
5. (Previously Presented) The device according to Claim 1, wherein the guide element contains a heating device for heating the profile.
6. (Previously Presented) The device according to Claim 1, wherein the edges of the through-opening of the guide sleeve are rounded on the inlet side and/or the outlet side.
7. (Previously Presented) The device according to Claim 1, wherein when bending hollow profiles, the device contains a bending block for internally supporting the hollow profile during the bending process.
8. (Previously Presented) The device according to Claim 1, wherein the progression of the guide groove relative to the longitudinal axis of the profile is adjustable.
9. (Previously Presented) The device according to Claim 1, wherein the bending sleeve contains a rotary drive.
10. (Previously Presented) The device according to Claim 1, wherein the bending sleeve completely encloses the profile.
11. (Previously Presented) The device according to Claim 1, wherein the bending sleeve is

realized in a U-shaped fashion.

12. (Previously Presented) The device according to Claim 1, wherein the edges of the bending sleeve are rounded on the inlet side and/or the outlet side.

13. (Previously Presented) The device according to Claim 1, wherein the inner surface of the bending sleeve contains a linear or slightly concave region referred to the longitudinal direction of the profile.

14. (Previously Presented) The device according to Claim 13, wherein the linear or slightly concave region amounts to $\approx 1/5$ of the profile diameter when bending a hollow profile with circular cross section.

15. (Previously Presented) The device according to Claim 1, wherein a shaped element with an adapted through-opening that sectionally corresponds to the cross section of the profile is arranged between the guide element and the bending sleeve, namely such that it acts upon the profile as a device for smoothing out wrinkles.

16. (Previously Presented) The device according to Claim 15, wherein the shaped element is realized in the form of an extension of the guide element in the direction of the bending sleeve.

17. (Previously Presented) The device according to Claim 15, wherein the shaped element is realized in the form of an extension of the bending sleeve in the direction of the guide element.

18. (Previously Presented) The device according to Claim 15, wherein the shaped element is realized in the form of a coil spring, a metal ring or an elastomer ring.